

# Our Response to ADOA's Requests for Information on Optimizing Performance of the States Telecommunications Assets

## **General Understanding**

We have reviewed the documentation provided and accessed information references on the State's Web Site. It is our understanding that the State is reviewing the current infrastructure and fiscal makeup of the existing voice and data network serving the Arizona State Government agencies. While it may be clear that the current system(s) have reached the limits of their effective operational life, what is clear is that there are opportunities to streamline operations, take advantage of new technologies, and improve the long term cost model for these services to the State.

# RCC's Experience and Qualifications

RCC is a well-established international consulting and engineering firm with a long and well established presence in the State of Arizona. RCC currently has ongoing projects with the Cities of Tucson and Yuma and has completed project for other entities within the State including Phoenix/Maricopa County, Flagstaff and the State 9-1-1 Program Office. RCC is based out of Woodbridge, New Jersey and is comprised of 130 staff members with the vast majority being engineering professionals. RCC has been in the consulting and engineering field for over 20 years with a focus on large complex technical projects municipal and state clients. A majority of past projects have been in the public safety area and comprise voice (wireless and wireline), Computer Aid Dispatch, voice and data radio systems and networks.

We have staff members that have worked in the past on statewide project for Arizona State Government. Most notably Thomas Gray, the Western Regional Vice President was the engineering manager on the original study for the statewide government telephone infrastructure back in 1989 while employed with Fluor Daniel. This study identified existing switching node locations at prison facilities, with a significant cost savings to the State at the time.

# Service Delivery Issues

The State owns transport and switching resources that are both strategic and operationally significant. These resources provide for the delivery of voice, data and video between key State locations. Further in a hoop-on/hoop-off fashion State agencies have access to both non-state (off-net) locations through out the state and can call out of state through the network at bulk rates.

What needs to be considered, at this point, is with the ageing of existing network equipment and with the advent of new technology now could be an appropriate time to reevaluate statewide telecommunication services provided to state agency clients.

While RCC would need to reevaluate the existing services and technology, it is our cursory assessment that the State of Arizona needs to consider a hybrid approach in the future. That

is to say, upgrading the existing transport resources to ensure adequate bandwidth and service availability to meet current and future demands, in particular demands associated with higher education.

RCC feels that we could provide targeted technical support in providing specific direction in optimizing service on existing State owned resources while identifying areas that could be better served through privatization. What is required is a quantitative analysis and from = data gathered and the development of a defendable business plan.

## **Migration Strategies**

System migration issues fall into four distinct areas, which need to be examined and dealt with separately. These areas are:

- 1. Evaluation of existing State owned and maintained transport equipment and its applicability for use in any new statewide network.
- Evaluation of existing State owned and maintained switching equipment (both CPE and nodes) and assessing its applicability for integration into any new statewide network.
- 3. Evaluation of existing desk top equipment and adjunct systems and associated client based concentrating equipment (ACD/UCD).
- 4. Evaluation of current service responsibilities and methods, with an eye to a competitive bid, third party option. This would require specifying required service response and over all service availability targets as part of the bid process and allowing vendors to define how this would be accomplished.

Clearly a fundamental plan needs to be in place prior to the development of the RFP. This plan needs to be defined in terms of a sound business model that is defendable and presentable for legislative review. Optimizing existing State owned resources is key. For example, the key transport resources in the State i.e. the digital microwave network that supports SONET based services through the majority of the State needs to be leveraged.

### **Cost Savings Measures**

With the advent of new technology, most specifically the introduction of packetized voiceover IP (VoIP/IP) there are opportunities to move away from a measured rate for service and to a flat rate approach. This will impact the decision process for privatization for both transport and switching services. With this in mind it would require a business case evaluation as to where privatization would benefit the State.

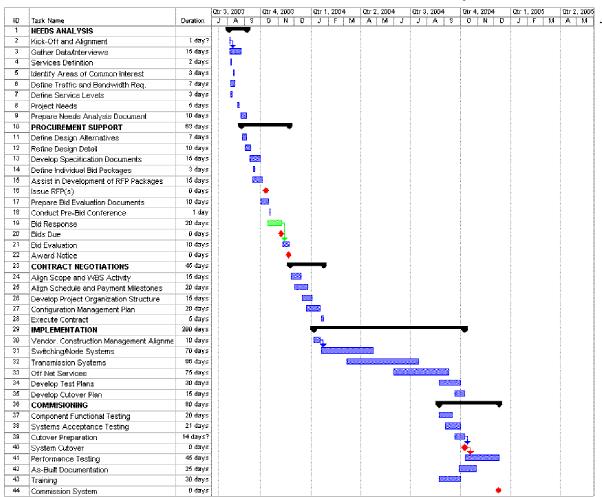
## A Process Driven Approach

RCC would like to put forth a proposal that would assist the State in evaluating existing needs and associated infrastructure, service/maintenance options, and existing state owned switching and transport resources. What RCC would propose would be to develop from this data a sound business case and path forward strategy based on the findings.

Assuming that these findings indicate, for example, that real value can be realized, to some degree, in the implementation of new technology, strategic privatization of services and technical support, and integration of existing resources. From past experience RCC has utilized proven processes to gather data, define viable alternatives, develop the most cost effective and defendable design/ business case, and prepare focused specifications for the procurement of components and services as required.

RCC is also capable of supporting the implementation of a new system that integrates existing state owned resources and new privatized services. From the design definitions developed RCC would assist the State in defining service and performance expectations for the new system/network. RCC would work with the State and vendor(s) to ensure measurable testing criteria are in place to guarantee component functionality, integrated systems operations, and service level performance under actual service conditions are met. Below we have provided an example of the type of phased approach that we would recommend.

State of Arizona Telecommunications Project



The above schedule is intended to identify process and anticipated durations based on our existing understanding of the current systems, service requirements, and realistic expectations for the future.

### **RCC Contact Information**

RCC is open to discuss evaluation alternatives and path forward issues. We would be pleased to assist the State of Arizona and specifically the Telecommunications Executive Goverence Committee in the preparation of definitive detail design and preparation of RFP documents, and assist in the negotiation of services as defined in the design. The single point of contact for this would be the Western Regional Vice President, whose contact information is provided below:

Thomas Gray Western Regional Vice President (909) 239-9642 266 E 33<sup>rd</sup> Street San Bernardino, CA 92404

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